

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1 - 5. (canceled)

6. (currently amended) A vehicle exhaust muffler having variable damping characteristics, the muffler comprising:

a muffler housing;

an exhaust gas pipe terminating at one end thereof in an interior of the muffler housing; and

a valve element having a closing member in the muffler housing adjacent the one end of the exhaust gas pipe, a guide rod with no internal passage having a first end coupled to the closing member, and a biasing element coupled to a second end of the guide rod, the biasing element located outside of and isolated from the muffler housing interior, the biasing element operative in a rest state to urge the closing element via the guide rod toward the one end of the exhaust gas pipe leaving a first annular space between the closing element and the one end of the exhaust gas pipe for restricted flow of exhaust gas therethrough, the closing element moving against a force of the biasing element whenever pressure of the exhaust gas flow increases sufficiently thereby leaving a second annular space larger than the first annular space between the closing

element and the one end of the exhaust gas pipe for less restricted flow of exhaust gas therethrough.

7. (previously presented) The vehicle exhaust muffler of Claim 6 wherein the biasing element comprises a spring housing coupled to an exterior surface of the muffler housing and a biasing spring resident in the spring housing and coupled to the second end of the guide rod.

8. (previously presented) The vehicle exhaust muffler of Claim 7 further comprising a spring guide coupled to the second end of the guide rod and shaped for receipt of one end of the biasing spring.

9. (previously presented) The vehicle exhaust muffler of Claim 6 further comprising a guide sleeve at least partially surrounding the guide rod and having a first end coupled to the biasing element.

10. (previously presented) The vehicle exhaust muffler of Claim 8 further comprising a damping element coupled between the second end of the guide rod and the spring guide.

11. (previously presented) The vehicle exhaust muffler of Claim 10 wherein the damping element comprises a ring of knitted wire.

12. (previously presented) The vehicle exhaust muffler of Claim 6 wherein the one end of the gas pipe is flared radially outwardly in conical fashion and wherein at least a portion of the closing element is likewise conical.

13. (previously presented) The vehicle exhaust muffler of Claim 7 wherein the biasing spring is conical.

14. (previously presented) The vehicle exhaust muffler of Claim 7, wherein the spring housing is sealed.

15. (previously presented) The vehicle exhaust muffler of Claim 6, further comprising:

a sealed spring housing coupled to an exterior surface of the muffler housing.

16. (previously presented) The vehicle exhaust muffler of Claim 15, further comprising:

a single biasing spring resident in the sealed spring housing and coupled to the second end of the guide rod, the spring solely operative against the second end of the solid guide rod.

17. (currently amended) A vehicle exhaust muffler having variable damping characteristics, the muffler comprising:

a muffler housing;

an exhaust gas pipe terminating at one end thereof in an interior of the muffler housing; and

a valve element having a closing member in the muffler housing adjacent the one end of the exhaust gas pipe, a solid guide rod having a first end coupled to the closing member, and a single biasing element located within a sealed biasing element housing, the single biasing element coupled to a second end of the guide rod, the biasing element located outside of and isolated from the muffler housing interior, the biasing element operative in a rest state to urge the closing element via the guide rod toward the one end of the exhaust gas pipe leaving a first annular space between the closing element and the one end of the exhaust gas pipe for restricted flow of exhaust gas therethrough, the closing element moving against a force of the biasing element whenever pressure of the exhaust gas flow increases sufficiently thereby leaving a second annular space larger than the first annular space between the closing element and the one end of the exhaust gas pipe for less restricted flow of exhaust gas therethrough.